

ABSTRACT OF THE DISCLOSURE

A method of manufacturing a semiconductor device includes forming a gate electrode over a substrate, implanting dopants into the substrate and activating the dopants using laser thermal annealing. During annealing, the laser and substrate are moved relative to one another, and the movement of the laser and the substrate relative to one another does not pause between and during activating one portion of the source/drain regions and activating another portion of the source/drain regions. Each pulse from the laser can respectively irradiate different portions of the source/drain regions, and a spot area of the laser is less than 50 millimeter².

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